UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/683,145	11/27/2001	Kelly Michael Kohlstrand	201-0251 RLC	5983

28804 7590 12/17/2004

CHUPA & ALBERTI, P.C.
31313 NORTHWESTERN HWY
SUITE 205
FARMINGTON HILLS, MI 48334

EXAMINER	
DANG, HUNG Q	
ART UNIT	PAPER NUMBER
2635	

DATE MAILED: 12/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/683,145	KOHLSTRAND, KELLY MICHAEL	
	Examiner	Art Unit	
	Hung Q Dang	2635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 November 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *10-18* is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 November 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vis U.S. Patent 4,345,380 in view of Shimizu et al. U.S. Patent 4,973,957.

Regarding claim 1, Vis teaches an assembly that identifies the existence of a gap and transmits a signal that is indicative of the existence of said gap (column 2 lines 15-23).

However, Vis does not specifically mention said signal transmission is a wireless transmission.

Shimizu et al. teahes a data collecting system, wherein wireless data transmission is employed (Figure 1 indicates wireless transmission).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide wireless transmission to the system disclosed by Vis, as evidenced by Shimizu et al., so that collected data can be wirelessly transmitted to a remote location.

3. Claims 2, 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vis U.S. Patent 4,345,380 in view of Shimizu et al. U.S. Patent 4,973,957 and in further view of Shigyo U.S. Patent 6,115,930.

Regarding claims 2, 5 and 6, as mentioned above, Vis in view of Shimizu et al. teaches an assembly for identifying the existence of a gap as claimed in claim 1. However, Vis in view of Shigyo does not specifically teach a force measurement portion.

Shigyo, in the same field of endeavor, teaches a gap measurement assembly, which further includes a strain gauge as a force measurement portion (column 11 lines 19-34) for measuring the existing gap.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a force measurement device to the assembly disclosed by Vis, as evidenced by Shigyo, so the existing gap can be measured.

4. Claims 3, 4, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vis U.S. Patent 4,345,380 in view of Shimizu et al. U.S. Patent 4,973,957 and in further view of Carter U.S. Patent 6,529,164.

Regarding claims 3, 4, 7 and 8, Vis in view of Shimizu et al. teaches an assembly for identify the existence of a gap and wirelessly transmit a signal that is indicative of the existence of a gap. However, Vis in view of Shimizu et al. does not teach a signal strength measurement portion.

One skilled in the art would recognize that signal strength measurement has been commonly provided in wireless telemetry systems to achieve effective data transmission, as evidenced by Carter.

Carter teaches a wireless telemetry system, which includes a signal strength measurement to achieve optimal data transmission (column 5 lines 11-28).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a signal strength measurement portion to the assembly disclosed by Vis in view of Shimizu et al., as evidenced by Carter, in order to achieve optimal data transmission.

Regarding claim 9, Vis also teaches a display (Figure 1, unit 65) for displaying said gap measurement.

Allowable Subject Matter

5. Claims 10-18 are allowed.

Regarding claim 10, the prior arts of record fail to teach or disclose a vehicular gap sensing assembly comprising a housing, which is adapted to be placed upon a first portion of a vehicle and including a force measurement assembly having an exposed surface and a member which is pivotally coupled to said housing and which is movable from a first position to a second position in which said member contacts said exposed surface, said force measurement assembly wirelessly transmitting a signal when said member contacts said surface; and a receiver which is in communication with said force

measurement assembly and which receives said signal and creates a display based upon said received signal.

Regarding claim 13, the prior arts of record fail to teach or disclose a method of ascertaining the existence of a gap between two portions of a vehicle as claimed in claim 13, said method comprises the steps of providing a gap measurement assembly; placing the gap measurement assembly on a first of the two portions; causing a second of the two portions to come into close proximity to the first of the two portions; creating a signal as said second of said two portions comes into close proximity with said first of said two portions; using said signal to ascertain the existence of a gap and the size of a gap; providing a data acquisition assembly; creating a second signal which is indicative of the existence and the size of a gap; and wirelessly transmitting the second signal to the data acquisition assembly.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Q Dang whose telephone number is (571) 272-3069. The examiner can normally be reached on 9:30AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on (571) 272-3068. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MICHAEL HORABIK
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600